



Coffee Break Training - Fire Protection Series

Hazardous Materials: Securing or Removing Unused Underground Tanks

No. FP-2013-19 May 7, 2013

Learning Objective: The student shall be able to describe the fire code requirements for securing or removing unused underground liquid storage tanks.

When an underground flammable or combustible liquid storage tank has outlived its usefulness or is otherwise no longer needed, the model fire codes prescribe methods to secure or remove the tank to minimize the chances of leaks, fires or tank collapse.

If a tank is being taken out of service **temporarily**, the fill line, gauge opening, vapor return and pump connection must be secured against tampering. Vent lines must remain open. It is up to the code official to determine what constitutes temporary closure.

In addition to the requirement listed above, tanks **not used for 90 days** must have their contents removed. Tanks that are out of service for **one year** must be removed from the ground or abandoned in place.



This underground combustible liquid storage tank is being removed from service at a local fire station.

Tank Removal Procedures

- Flammable and combustible liquids must be removed from the tank and pipes. All product vapors must be purged before removal.
- Pipe that is no longer used must be disconnected and removed from the ground unless the fire code official determines that removal is not practical due to building foundations, nearby construction, obstructions or other factors. Aboveground fill and vent pipes must be removed.
- Tank openings must be plugged, with a 1/8-inch to 1/4-inch (3.2 to 6.4 millimeters) opening left for pressure equalization.

Tank Abandonment Procedures

- Flammable and combustible liquids must be removed from the tank and pipes.
- Suction, inlet, gauge, vapor return and vapor lines must be disconnected. All other piping must be capped or plugged. Aboveground fill and vent pipes must be removed.
- The tank must be filled with an approved, inert solid material.
- A record of the tank size, location and date of abandonment must be maintained by the property owner. This would be a good use of Geographic Information System applications to maintain a permanent record in the government agency's archives.

It is important that the code official check with state or local environmental regulators who may have more restrictive requirements. For additional information, refer to National Fire Protection Association 1, *Uniform Fire Code*, Chapter 66, or *International Fire Code*, Chapter 57.



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